

ABSTRACT OF THE DISCLOSURE

An apparatus comprising a first bus segment, a second bus segment and a switch. The first bus segment may be configured to transfer data in either a first direction or a second direction. The second bus segment may be configured to transfer data in either  
5 the first direction or the second direction. The switch may be connected between the first bus segment and the second bus segment. The switch may be configured to transfer data in both the first direction and the second direction simultaneously.